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REMARKS

The application has been reviewed in light of the final Office Action dated January 20, 2006. Claims 1-11 and 23 are pending, with claim 1 being the sole pending claim in independent form. Claims 12-22 were withdrawn by the Patent Office from examination, and therefore canceled without disclaimer or prejudice to Applicant's right to pursue the claims in one or more divisional or continuation applications. By this Amendment, claim 1 has been amended to clarify the claimed invention. No new matter has been introduced by this Amendment. Support for the claim amendments can be found in the application at, for example, page 35, line 3 through page 36, line 22.

Claims 1, 2, 5-7, 10, 11, and 23 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 4,783,738 to Li et al., in view of Hennessy and Patterson, "Computer Architecture - A Quantitative Approach", (2nd Edition 1996) (herein referred to as Hennessy) and further in view of U.S. Patent No. 4,858,110 to Miyata. Claims 1-11 and 23 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 5,430,885 to Kaneko et al., in view of Hennessy and further in view of Miyata. Claims 3, 4, 8 and 9 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Li in view of Hennessy and further in view of Kaneko.

Applicant has carefully considered the Examiner's comments and the cited art, and respectfully submits that independent claim 1 as amended is patentable over the cited art, for at least the following reasons.

Independent claim 1 relates to a parallel processor comprising a global processor and a processor-element block which comprises a plurality of processor elements each comprising a register file and an operation array for processing a plurality of sets of data. The plurality of

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processor elements are divided into pairs of an even-numbered processor element and an odd-numbered processor element, each pair specified by a single address such that write data is transferred to one of the even-numbered processor element and the odd-numbered processor element and read data is read from the other, by a single addressing operation. Claim 1 has been amended to include this feature.

Li, as understood by Applicant, is directed to an array processor including an instruction adapter for the processing elements of the array processor. Each processing element has an arithmetic logic unit (ALU) and a local memory.

Kaneko, as understood by Applicant, is directed to a multi-processor system for multi-dimensional image signal processing. The system proposed by Kaneko includes a host processor and plural co-processors. Each co-processor includes an arithmetic logic unit (ALU) and a local memory.

Hennessy is cited in the Office Action as purportedly proposing the use of a register file as a local memory to hold and supply data operands to a processor.

Applicant does not find teaching or suggestion in the cited art, however, that the plurality of processor elements are divided into pairs of an even-numbered processor element and an odd-numbered processor element, each pair specified by a single address such that write data is transferred to one of the even-numbered processor element and the odd-numbered processor element and read data is read from the other, by a single addressing operation, as provided by amended claim 1.

Independent claim 1 is therefore patentable over the cited art for at least the above reasons. Dependent claims 2-11 and 23 are patentable over the cited art for at least similar reasons.

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     In view of the amendments to the claims and remarks hereinabove, Applicant submits that the application is now in condition for allowance. Accordingly, Applicant earnestly solicits the allowance of the application.

     If a petition for an extension of time is required to make this response timely, this paper should be considered to be such a petition. The Office is hereby authorized to charge any fees that may be required in connection with this amendment and to credit any overpayment to our Deposit Account No. 03-3125.

     If a telephone interview could advance the prosecution of this application, the Examiner is respectfully requested to call the undersigned attorney.

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Respectfully submitted,

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